

CEM1001H
The Challenges of Urban Policy Making
Prof. Shoshanna Saxe and Prof. Richard Stren
Thursday, 12 pm – 3 pm, SF1009

Addressing societal and engineering challenges in the 21st century requires engineers to think holistically about the systems we design and build. Public policy often dictates what engineering projects are commissioned and what values are being optimized for in engineering practice (e.g. cost, beauty, environment, safety, equity). However, too few engineers understand the drivers of public policy, how public policy is developed, and the role it plays in engineering. Similarly, too few policy makers understand the applied science of engineering. The interplay between policy and civil engineering is particularly acute in the urban environment, where civil engineering works (transportation, housing, water services, libraries etc.) are concentrated and where, in Canada, the public policies of three levels of government influence engineering practice.

This seminar course challenges engineers to think about how public policy is made and how it guides the practice of engineering both directly and indirectly. Particular focus is placed on urban policy and urban engineering. The first month of the course will deal with the process of urban policy making examining how issues emerge, how important ideas are framed, priorities are established, and agendas are set and managed. Factors to be considered include the role of bureaucratic and political actors, organized interests and non-governmental groups, the importance and influence of networks, and the potential for new models and options for the engagement of stakeholders and citizens at large.

The second and third month of the course will focus on the relationship between public policy and the practice of civil engineering. The focus of the course will be to examine the myriad ways public policy and priorities intersect with the development of the built environment. The relationship between public policy and engineering in housing, transport, energy, water and sustainability will be discussed. The focus of the course will be on Canadian cities with examples from cities located elsewhere in the high-income world; examples and experiences from other parts of the world are welcomed.

Textbook and Readings

There is no textbook for this course, background material will be provided on the Quercus website for weekly readings. The required readings are a **mandatory** part of the course; significant time should be dedicated each week to the assigned readings. Required readings are to be read **in advance** of the seminar for which they are listed. Further suggested reading lists are provided for students who seek to advance their knowledge and understanding.

Students who wish to purchase a good book on urban policy and governance in Canada might consider one of the following:

- 1) Leslie Pal. 2013. Beyond Policy Analysis. Public Issue Management in Turbulent Times. Toronto: Thomson Nelson. 5th Edition.
- 2) Andrew Sancton and Robert Young, eds. 2009. Municipal Government in Canada's Provinces. Toronto: University of Toronto Press (paper).

3) Andrew Sancton. 2014. Canadian Local Government. An Urban Perspective (Second Edition)
Toronto: Oxford University Press (paper).

4) Richard Tindal, Susan Nobes Tindal, Kennedy Stewart and Patrick J. Smith. 2016. Local
Government in Canada. 9th Edition. Toronto: Nelson (paper).

Marks and Grading

Participation and contribution to in-class discussions: 20%

Book review paper: 30%

Final policy and engineering paper: 50%

Grading:

B grades will be given for reasonable quality work that meets the expected standards of graduate level work. A level work is clearly superior and will demonstrate insight into the topic in addition to what has been presented in class or assigned in readings (e.g. further thought). A+ level work is truly exceptional. It is objectively superior to what could have been fairly expected and has caused the reader to think, or see an issue – at least temporarily – in a new way. C grades will be given to work that fails to meet expectations. Modifiers (+ and -) will be given to work that falls between these categories.

Marking Rubric for Class Participation

Grade	Attendance	Readings	Class Discussions
A	Attends all lectures, or all lectures less one (unexcused absence)	Supplements required readings with further thought either through engagement with suggested readings or other additional resources found by the student	Actively participates in seminar discussions, is thoughtful and thought provoking. Demonstrates understanding and insight into the readings. Is respectful of differing opinions. Adds new ideas and perspective to seminar discussions.
B	Misses no more than 2 lectures (unexcused absences)	Reads all required readings	Actively participates in seminar discussions, is thoughtful. Demonstrates understanding of the readings. Is respectful of differing opinions.
C	Misses no more than 4 lectures (unexcused absences)	Reads ~70% of required readings	Participates somewhat in seminar discussions
D	Misses more than 4 lectures (unexcused absences)	Reads half of the required readings	Participates minimally in seminar discussions

Academic Integrity

“Students in graduate studies are expected to commit to the highest standards of integrity and to understand the importance of protecting and acknowledging intellectual property. For example, it is assumed that they bring to their graduate studies a clear understanding of how to cite references appropriately, thereby avoiding plagiarism. See for example, How Not to Plagiarize. Regarding plagiarism, the Code includes the following statements:

B.i.1. It shall be an offence for a student knowingly:

(d) to represent as one's own idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e., to commit plagiarism.

Wherever in the Code an offence is described as depending on "knowing," the offence shall likewise be deemed to have been committed if the person ought reasonably to have known.

Other academic offences include the possession and/or use of unauthorized aids in examinations, submitting the same paper for different courses, forgery (whether of academic records or other documents), concocting facts or references to sources, personating someone, and other forms of cheating and academic dishonesty. Please refer to sections B.i.1. and B.i.3. in the *Code* for detailed descriptions of offences applicable to students.”

Source: <http://www.sgs.utoronto.ca/facultyandstaff/Pages/Academic-Integrity.aspx>

Further resources (not exhaustive):

<http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjul012002.pdf>

<http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf>

CEM 1001H: The Challenges of Urban Policy Making Unit One Reading List

Week 1: Introduction to cities, urban policy and engineering

September 13, 2018

Required readings:

Tribus, Myron, 1978. "The engineer and public policy-making" IEEE spectrum, April 1978, pg 48-51.

Glaeser, Edward. 2011 Triumph of the City: How our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier and Happier, pp. 1-15. New York: Penguin Press.

Florida, Richard (2017). "The Urban Contradiction" The New Urban Crisis: How Our Cities Are Increasing Inequality, Deepening Segregation, and Failing the Middle Class and What We Can Do About It. New York: Basic Books. Pg 1-12

Suggested readings:

Hulchanski, David (2010). "The three cities within Toronto: Income polarization among Toronto's Neighbourhoods, 1970-2005." Cities Centre, University of Toronto, 2010 ISBN 978-0-7727-1478-7

Canada Infrastructure (2016) "Informing the Future: Canada Infrastructure Report Card", canadainfrastructure.ca,
http://canadianinfrastructure.ca/downloads/Canadian_Infrastructure_Report_2016.pdf

Week 2: Local Government

September 20, 2018

Required Readings

Sancton, Andrew. 2015. "Central Governments and Local Governments" in *Canadian Local Government. An Urban Perspective* (2nd Edition) Toronto: Oxford University Press. pp. 27-46.

Shah, Anwar. 2006. "A Comparative Institutional Framework for Responsive, Responsible, and Accountable Local Governance" in Anwar Shah, ed. 2006. *Local Governance in Industrial Countries* Washington: The World Bank, pp. 1-40. [Note to students: browse over this article, no need to read it closely unless you're particularly interested]

Tindal, C. Richard, Susan Nobes Tindal, Kennedy Stewart and Patrick J. Smith. 2017. "Municipal Governing Structures" in *Local Government in Canada* (9th edition) Toronto: Nelson, pp. 224-267.

Supplementary Readings

Bramwell, Allison and Neil Bradford. 2014. "Civic Infrastructures of Innovation and Inclusion? Reflections on Urban Governance in Canada" in Neil Bradford and Allison Bramwell, eds. *Governing Urban Economies. Innovation and Inclusion in Canadian City Regions*. Toronto: University of Toronto Press, pp. 319-37.

Gilbert, Richard, Don Stevenson, Herbert Girardet and Richard Stren. 1996 [Reissued in 2016] *Making Cities Work. The Role of Local Authorities in the Urban Environment* London: Earthscan.

Hambleton, Robin. 2015. *Leading the Inclusive City. Place –Based Innovation for a Bounded Planet* Bristol, U.K: Policy Press.

Hamilton, David K. 2014. *Governing Metropolitan Areas. Growth and Change in a Networked Age* New York and London: Routledge.

Hume, Gord. 2016. *The Leadership Crisis* Union, Ontario: Municipal World Publishers.

Public Administration and Development. 2005. Special Issue on Metropolitan Governance Reform. (October), eds. Richard Stren and Robert Cameron.

Rao, Nirmala. 2007. "Toronto: A Penchant for Metro Reform" and "Conclusion" in *Cities in Transition. Growth, change and governance in six metropolitan areas* London: Routledge, pp. 64-92, 167-73.

Segbers, Klaus, ed. 2007. *The Making of Global City Regions: Johannesburg, Mumbai/Bombay, São Paulo, and Shanghai*. Baltimore: Johns Hopkins University Press

Siegel, David. 2015. *Leaders in the Shadows. The Leadership Qualities of Municipal Chief Administrative Officers* Toronto: University of Toronto Press.

Week 3: The Policy Process
September 27, 2018

Required Readings

Pal, Leslie. 2014. "Problem Definition in Policy Analysis" Chapter 3 in *Beyond Policy Analysis. Public Issue Management in Turbulent Times* Toronto: Nelson, pp. 97-128.

Sancton, Andrew. 2015. "Policy-making" Chapter 12 in *Canadian Local Government. An Urban Perspective* Toronto: Oxford University Press, pp. 249-67.

Wolf, E.E., and Wouter Van Dooren. 2017 "How Policies Become Contested: A Spiral of Imagination and Evidence in a Large Infrastructure Project" *Policy Sciences, Dordrecht* 50, 3 (September) 449-68.

Supplementary Readings

Beall, Jo. 2000. "From the Culture of Poverty to Inclusive Cities. Re-framing Urban Policy and Politics" *Journal of International Development* 12, 6 (August), 843-56.

Fischer, Frank. 2003. *Reframing Public Policy. Discursive Politics and Deliberative Practices* New York: Oxford University Press.

Fischer, Frank, Gerald J. Miller, and Mara S. Sidney, eds. *Handbook of Public Policy Analysis. Theory, Politics, and Methods*. Boca Raton: CRC Press.

Lawrence, Eric, Robert Stoker and Harold Wolman. 2010. "Crafting Urban Policy: The Conditions of Public Support for Urban Policy Initiatives" in *Urban Affairs Review* 45, 3 (January) 412-30.

Moran, Michael, Martin Rein, and Robert E. Goodin, eds. 2006. *The Oxford Handbook of Public Policy* New York: Oxford University Press, esp. chapters by Giandomenico Majone, "Agenda-Setting" pp. 228-50; and Colin Hay, "Globalization and Public Policy", pp. 587-604.

Roe, Emery. 1994. "Introduction to Narrative Policy Analysis: Why it is, What it is, and How it is" in Emery Roe, *Narrative Policy Analysis. Theory and Practice* Durham: Duke University Press, 1-19.

Scholten, P.W. 2013. "Agenda Dynamics and the Multi-level Governance of Intractable Policy Controversies: The Case of Migrant Integration Policies in the Netherlands" in *Policy Sciences, Dordrecht* 46, 3 (September) 217-36.

Soroka, Stuart N. 2002. *Agenda-Setting Dynamics in Canada* Vancouver: UBC Press.

Tindal, C. Richard, Susan Nobes Tindal, Kennedy Stewart, and Patrick J. Smith. 2017. "Municipal Policy Making" in *Local Government in Canada*. Toronto: Nelson, pp. 347-82.

Week 4: District Energy Field Trip (City of Toronto)
October 4th, 2018

Required Readings

UN District Energy in Cities Initiative,
<http://www.districtenergyinitiative.org/sites/default/files/publications/desooverview12-pageslight-version-21092017534.pdf>. Comprehensive description of all aspects of district energy with case studies from around the world. (Suggested chapters for reading: 1.1-1.4, 2.1-2.5)

Terri Chu, Mary Ellen Richardson, Marlena Rogowska (2014), “The Importance of District Energy in Building Resilient Cities” in Canada: Becoming a Sustainable Energy Powerhouse Chapter 10: Building Resilient Cities: Focusing on the Essential Thermal Grid. Canadian Academy of Engineering, Drs Clem Bowman and Richard Marceau

Tozer, L. (2013) ‘Community energy plans in Canadian cities: Success and barriers in implementation’, *Local Environment*, 18(1), pp. 20–35. doi: 10.1080/13549839.2012.716406.

Supplementary Readings

Carou, Fernando, (2018). The Role of Thermal Networks for Low-Carbon Resilient Communities, IDEA Annual Conference June 13, 2018,
<https://www.districtenergy.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=8711bc56-c91b-f6b1-9dac-af7ad72f6ac8&forceDialog=0>

City of Toronto Community Energy Planning, <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/community-energy-planning/>

City of Toronto District Energy Systems, <https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/district-energy/>

Enwave Deep Lake Water Cooling System, System tour description,
https://www.linkedin.com/pulse/planning-low-carbon-future-ingredients-matter-david-macmillan-mes/?lipi=urn%3Ali%3Apage%3Ad_flagship3_profile_view_base_recent_activity_details_all%3B5e0Hy5LIRX%2BdSMc2DHs9EQ%3D%3D

Jaccard, M., Failing, L. and Berry, T. (1997) ‘From equipment to infrastructure: Community energy management and greenhouse gas emission reduction’, *Energy Policy*, 25(13), pp. 1065–1074. doi: 10.1016/S0301-4215(97)00091-8.

Peter Ostergaard, Smart Planning for Communities (2012). “The Regulation of District Energy Systems” A program of the Fraser Basin Council,
https://pics.uvic.ca/sites/default/files/uploads/publications/WP_District_Energy_May2012.pdf

Regent Park District Energy System, System tour description,
<https://www.linkedin.com/pulse/what-do-urban-energy-solutions-look-like-lot-actually-macmillan-mes/>

CEM 1001H: The Challenges of Urban Policy Making Unit Two Reading List

Week 5: Buildings, Housing, Land Use
October 11, 2018

Required Reading:

Blais, P. 2010. “*Municipal Services: Costs and Prices*” In *Perverse cities: hidden subsidies, wonky policy, and urban sprawl*. 2010, Vancouver: UBC Press. Pg 91- 106

Ministry of Municipal Affairs. 2017. “*Potential Changes to Ontario’s Building Code: Summer and Fall 2017*”. Toronto, Ontario, Canada. Available at:
<http://www.mah.gov.on.ca/AssetFactory.aspx?did=19606>. Pg 1-40

Toronto Zoning Interactive Map http://map.toronto.ca/maps/map.jsp?app=ZBL_CONSULT

Kirkpatrick, D., Hakim, D. and Glanz, J. (2017) ‘Grenfell Burned : Regulators Put Cost Before Safety’, *New York Times*, pp. 1–11. Available at:
https://www.nytimes.com/2017/06/24/world/europe/grenfell-tower-london-fire.html?_r=0.

Further Reading:

Green, N. 2011. “*A Chronicle of Urban Codes in Pre-Industrial London’s Streets and Squares*” In *Urban Coding and Planning*. Edited by S. Marshall. London and New York: Routledge Taylor and Francis Group. doi: 10.4324/9780203717561

Hulchanski, J. David. 2004. “What Factors Shape Canadian Housing Policy?” In Robert Young and Christian Leuprecht, eds. *Canada: The State of the Federation, 2004. Municipal-Federal Provincial Relations in Canada*, pp. 221-47. Queen’s University: Institute of Intergovernmental Relations. Published by McGill Queen’s University Press.

Week 6: Transportation
October 18, 2018

Required Reading:

Bliss, Laura (2017) “Who is Calling the Shots on Autonomous Vehicles?” CityLab.
<https://www.citylab.com/equity/2017/04/whos-calling-the-shots-on-autonomous-vehicles/523386/>

Canada’s Ecofiscal Commission. 2015. *We Can’t Get To There From Here: Why Pricing Traffic Congestion is Critical to Beating It*. November. [Concentrate on pgs. 1-32]

Elon Musk and the Boring Company (Start of the talk, don't need to watch the entire video).
https://www.ted.com/talks/elon_musk_the_future_we_re_building_and_boring

Shoup, Don. 2011. "The Twenty-first Century Parking Problem" In *The High Cost of Free Parking*. Chicago : American Planning Association Planners Press, c2011. Pg 1-18

Further Reading:

- Walker, Jarrett. 2016. "Why Cars and Cities Are a Bad Match." *Washington Post*, March 2.
- Vanderbilt, Tom. 2008. "Why More Roads Lead to More Traffic (and What to Do About It)," in *Traffic: Why We Drive the Way We Do (And What It Says About Us)*, pp. 153-175. New York: Random House.
- Canada's Ecofiscal Commission. 2015. *We Can't Get To There From Here: Why Pricing Traffic Congestion is Critical to Beating It*. November. [Concentrate on pgs. 1-32]
- Mackenzie, Hugh. 2013. *Canada's Infrastructure Gap: Where It Came From and Why It Will Cost So Much To Close*. Ottawa: Canadian Centre for Policy Alternatives. 15 pp.
- Bazel, Philip and Jack Mintz. 2014. *The Free Ride is Over: Why Cities, and Citizens, Must Start Paying for Much-Needed Infrastructure*. School of Public Policy Research Papers 7(14). Calgary: University of Calgary. 30 pp.
- Altshuler, Alan. 2010. "Equity, Pricing, and Surface Transportation Politics." *Urban Affairs Review* 46(2): 155-179.
- Brown, Jeffrey R, Eric Morris, and Brian D. Taylor. 2009. "Planning for Cars in Cities: Planners, Engineers, and Freeways in the 20th Century." *Journal of the American Planning Association* 75(2): 161-177.
- Walker, Jarrett. 2012. *Human Transit: How Clearer Thinking About Public Transit Can Enrich Our Communities and Our Lives*. Washington: Island Press.
- Dutzik, Tony, Gideon Weissman, and Phineas Baxandall. 2015. *Who Pays for Roads? How the "Users Pay" Myth Gets in the Way of Solving America's Transportation Problems*. Boston, M.A.: U.S. PIRG Education Fund.
- Taylor, Brian, D. 2010. *How Fair is Road Pricing? Evaluating Equity in Transportation Pricing and Finance*. Report for the Bipartisan Policy Center, Washington. 43 pp.

Week 7: Waterfront Toronto
October 25, 2018

Required Reading:

White, J (2015). "Pursuing design excellence: Urban design governance on Toronto's waterfront", *Progress in Planning* 110, 1–41, <http://dx.doi.org/10.1016/j.progress.2015.06.001>

Further Reading:

Sidewalk Toronto <https://sidewalktoronto.ca>

Waterfront Toronto <http://www.waterfronttoronto.ca/nbe/portal/waterfront/Home>

David Rider and Daniel Dale (2011) “Doug Ford’s dream waterfront? Ferris wheel, monorail and a boat-in hotel”

https://www.thestar.com/news/gta/2011/08/30/doug_fords_dream_waterfront_ferris_wheel_monorail_and_a_boatin_hotel.html

Scott Lightfoot “Council votes down Fords' Port Lands plan” <http://toronto.ctvnews.ca/council-votes-down-fords-port-lands-plan-1.700655>

Alex Bozikovic (2017) “Google's Sidewalk Labs signs deal for 'smart city' makeover of Toronto's waterfront” <https://beta.theglobeandmail.com/news/toronto/google-sidewalk-toronto-waterfront/article36612387/>

John Lorinc (2018). Waterfront Toronto gets tough with Sidewalk Labs, Spacing Magazine <http://spacing.ca/toronto/2018/07/31/lorinc-waterfront-toronto-gets-tough-with-sidewalk-labs/>

Week 8: Sustainability and Resilience

November 1, 2018

The Rockefeller Foundation, Arup, City Resilience Index: Understanding and Measuring City Resilience (2017)

Stoney, C. and Hilton, R. (2009) ‘Sustainable Cities: Canadian Reality or Urban Myth?’, Commonwealth Journal of Local Governance , (4), pp. 46–76.

Vojnovic (2014). Urban Sustainability: Research, politics, policy and practice, Cities, 41, 530 – 544.

Further Reading:

Egilmez, G., Gumus, S. and Kucukvar, M. (2015) ‘Environmental sustainability benchmarking of the U.S. and Canada metropolises: An expert judgment-based multi-criteria decision making approach’, Cities. Elsevier Ltd, 42(PA), pp. 31–41. doi: 10.1016/j.cities.2014.08.006.

Rogers, C. D., Df, C. and Eur, R. (2018) ‘Engineering future liveable , resilient , sustainable cities using foresight’, Proceedings of the Institution of Civil Engineers - Civil Engineering, 171, pp. 1–7. doi: 10.1680/jcien.17.00031.

Week 9: Water
November 8, 2018

Required Reading:

Caspar Honegger, Christoph Oehy (2016) The road to flood resilience in Canada, Managing Editor: Urs Leimbacher , Swiss Re Corporate Real Estate & Logistics/ Media Production, Zürich

Insurance Bureau of Canada (2018). Combatting Canada's Rising Flood costs.

Karvonen (2014). "The Dilemma of Water in the City" in Politics of Urban Runoff – Nature, Technology and the Sustainable City, MIT Press. Pg 1-16.

Further Reading:

Toronto Water (2015). Toronto Water Strategic Plan (2010-2020): Establishing Toronto Water's Path to Excellence. Pg 1-16.

Toronto Water (2010). Development of a Strategic Plan of Water and Wastewater Utility Industry, Environmental Scan, pg 1-45.

Week 10: Energy
November 15, 2018

Required Reading:

Hammer, S A. (2008) "Chapter 6 – Renewable Energy Policymaking in New York and London: Lessons for other 'World Cities'?" In Urban Energy Transition: From Fossil Fuels to Renewable Power, 143-172, editor Droege, P. Amsterdam ; Boston ; London : Elsevier, 2008.

Janette Webb , David Hawkey , Heather Lovell , David McCrone , Margaret Tingey and Mark Winskel (2016). "Part 1 Overview" in Sustainable Urban Energy Policy: Heat and the city, by Routledge Abingdon and New York. Pg 1 – 45

Further Reading:

Jacobson, C. D. (2000) Chapter Three, "Electric Utilities" In Ties that bind: economic and political dilemmas of urban utility networks, 1800-1990.
<http://digital.library.pitt.edu/islandora/object/pitt:31735062135888>

Staff Background Report (2007) Energy Efficiency and Beyond Toronto's Sustainable Energy Plan <http://www.toronto.ca/legdocs/mmis/2007/pe/bgrd/backgroundfile-4989.pdf>

Week 11: Small Cities – Big Cities
November 22, 2018

Bell, David, and Mark Jayne. Small Cities: Urban Experience Beyond the Metropolis: Chapter 1
Conceptualizing small cities, Taylor and Francis, 2006.

David Wolfe (2009), 21st Century Cities in Canada; The geography of Innovation, CIBC scholar-
in-residence lecture, Conference board of Canada. Medium sized cities, pg 163 – 174